UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/204,238	12/03/1998	GREGORY S. HAMILTON	AR138-X	5254

29728 7590 03/30/2006

GUILFORD PHARMACEUTICALS C/O
FOLEY & LARDNER LLP
3000 K STREET, NW
WASHINGTON, DC 20007-5143

EXAMINER	
CHANG, CELIA C	
ART UNIT	**PAPER NUMBER**
1625	

DATE MAILED: 03/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/204,238	HAMILTON ET AL.	
	Examiner	Art Unit	
	Celia Chang	1625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *73-86* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *73-86* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Newly amended claims 73-86 have been entered.

Claims 73-68 are pending.

2. In view of the newly amended scope, the rejections of the previous office action are moot in view of the following new ground of rejection.

Applicants have limited the R2 moieties to the heterocyclic moieties of claim 73 or the free acid moieties of claim 80 the following new ground of rejection is now applicable.

Claims 73-86 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description as well as failing to comply with the enablement requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention; or the specification has been described in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to operate/use the invention.

Lack of description

To the extend that the scope of the term "neurological disorder" encompassed all and every neurological disorder, the specification lacks description for such scope. Especially, the scope of neurological disorder included diseases such as Creutzfeldt-Jacob disease, diabetic neuropathies etc. for which no antecedent basis or description can be found for such scope.

On page 22, it was disclosed that compounds of the current invention can be administered orally, parenterally, topically.....intracranially by injection of infusion techniques etc. On page 43, thirteen compounds were disclosed to be tested for MPTP model of Parkinson's disease. Among the thirteen compounds only compound L or M is drawn to the instant claimed scope, assuming Z is S [Y is C] for compound L or Y is S [Z is C] for compound M. Only compound L provided a 14% recovery of MPTP induced lesion upon co-administration with MPTP. No statistical analysis was presented therefore, no conclusive presentation was found with the 14% whether significant or not.

For a compound to have central nervous activity the compound must cross the blood brain barrier. Such description on page 22 and 43 are insufficient in providing how to operate for the methods. Please note that intracranial administration i.e. delivering drug to the brain directly, is very complexed. Such process frequently causes damage to the brain and has been used as a research tool to cause brain damage (see Biosis 199800098094 or Biosis 199396031042). The specification provides only one compound being co-administered s.c.with MPTP to show inconclusive result does not provide sufficient dosage preparation or guidelines for the claimed method. Therefore, in so far as administration of the compound is concerned, whether by oral, parenteral, topical or directly to the brain is concerned, there is insufficient description for such method including all possible means of administration.

Lack of enablement

As stated in the MPEP 2164.01(a) "There are many factors to be considered when determining whether there is sufficient evidence to support a determination that a disclosure does not satisfy the enablement requirement and whether any necessary experimentation is "undue". The factors to be considered herein are those set forth as the In re Wands, 8 USPQ 2nd 1400 (1988) decision.

Nature of invention

The claims are drawn to the method of treating all neurological disorder using compounds of claim 73 or 80 for which an "acidic" moiety or analogous functional group must be found at wherein the R2 moiety is.

Not only treating neurological disorder broadly included both peripheral nerve and central nervous system, the neurological disorder also included the administering of such compounds by any and all possible means to the peripheral or central nervous location.

The state of the art and predictability

Treating a neurological disorder such as neurodegenerative disease included those such as Creutzfeldt-Jacob disease etc. that has been well recognized in the art to be literally untreatable (CA 126:324757). In addition, in so far as neuropathies is concerned, it is well recognized that many neuropathies have different etiology and treatment of such condition is highly specific and in absence of specific description of enablement, one skilled in the art are unable to operate such process (see CA 127:174580).

In addition, it is well recognized in the art that neurotrophic factors have local response without involving mechanisms in the cell body (CA 121:50191).

Furthermore, for the CNS related neurological disorders, it is a well-known fact that any compound having CNS efficacy must cross the blood brain barrier. Compounds which have

strong acidity such as the instant claims, have been known to have no practical utility in the CNS system due to its inability to cross the blood-brain barrier (see US 6,071,932, col. 2, lines 31-38).

The amount of guidance and working examples

In the specification, it was exclusively disclosed on pages 55-59, topical compositions containing the compounds. No description or examples were found for composition comprising other than topical carrier. The specification provides none of the composition or dosage preparation or guidelines for CNS route of administration, i.e. no guidance was provided in the specification for intracranial administration. The specification provides only one compound being co-administered with MPTP to show inconclusive result does not provide sufficient dosage preparation or guidelines for the claimed method. This limited operation of one compound being coadministered with inconclusive result, does not provide sufficient guidance to one having ordinary skill in the art to practice the method claims with such enormity of material having a wide variation of chemical properties. Therefore, in so far as administration of the compound is concerned, whether by oral, parenteral, topical or directly to the brain is concerned, the specification provided insufficient guidance for such method. Yet, the specification exclusively provided description limited to topical composition, such exclusivity thus serves as description and enablement with teaching away from non-topical route of administration based on the In re Baird guidelines (In re Baird 29 USPQ2d 1550). Section 112 requires the specification itself to provide guidance instead of letting other to find out for themselves. Ex parte Dash 27 USPQ2d 1481, 1488; In re Gardner 166 USPQ 138.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Celia Chang whose telephone number is 571-272-0679. The examiner can normally be reached on Monday through Thursday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang, can be reached on 571-272-0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

OACS/Chang
Mar, 27, 2006

Celia Chang
Primary Examiner
Art Unit 1625